## REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following remarks, is respectfully requested.

Claims 10-31 are pending. Claims 10-13, 15, and 19 are amended.

Support for changes to Claims 10-13 are found at least in Applicants' Figs. 1-3 and the corresponding written description. The remaining changes to the claims address minor informalities. Thus, the changes to the claims add no new matter.

The Official Action of April 26, 2010 (hereinafter "Official Action") and Advisory Action of August 9, 2010 (hereinafter "Advisory Action") rejected Claims 10-14, 17, 23, 26, and 29 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Application Publication No. 2002/0181422 to Parantainen et al. (hereinafter "Parantainen"), U.S. Patent Application Publication No. 2002/0178250 to Haartsen, and U.S. Patent Application Publication No. 2004/0219917 to Love et al. (hereinafter "Love"); rejected Claims 15, 16, 18 and 19 under 35 U.S.C. § 103(a) as unpatentable over Parantainen, Haartsen, Love, and MPEP 2144.03; rejected Claims 21, 24, 27 and 30 under 35 U.S.C. § 103(a) as unpatentable over Parantainen, Haartsen, Love, and U.S. Patent No. 5,870,380 to Diehl et al. (hereinafter "Diehl"); and rejected Claims 22, 25, 28 and 31 under 35 U.S.C. § 103(a) as unpatentable over Parantainen, Haartsen, Love, and U.S. Patent Application Publication No. 2003/0007466 to Chen.

Applicants' representative and the Examiner on September 28, 2010. During the interview, Applicants' representative presented arguments that the applied references fail to disclose or suggest "a fourth step for the terminal to autonomously retransmit a data packet from the plurality of data packets to the base station without sending a transmission request to the base station ... upon reception of the NAK signal," as previously recited in Claim 10. The

Examiner did not look favorably to these arguments and further suggested clarifying the features recited in Claim 10.

In view of the Examiner's comments, Applicants' representative further proposed amending Claim 10 to recite features analogous to "the plurality of data packets excluding ACK and NAK packets," and the terminal autonomously assigning "the resource for autonomous retransmission of a data packet from the plurality of data packets to the base station without sending a transmission request to the base station." The Examiner looked favorably to these proposed claim changes, but indicated that further consideration may be necessary upon filing a supplemental amendment. Amendments analogous to those presented during the interview are incorporated herein, and arguments presented during the interview are reiterated below.

Claim 10 is amended to recite, inter alia:

Claim 10 (Proposed): A communication method for a communication system including a base station and a terminal, ... the communication method comprising:

. . .

a third step

for the terminal to transmit a plurality of data packets as the new data to the base station based on the value of the resource for data transmission, the plurality of data packets excluding ACK and NAK packets; and

a fourth step

for the terminal to autonomously assign the resource for autonomous retransmission of a data packet from the plurality of data packets to the base station without sending a transmission request to the base station for the resource upon reception of the NAK signal from the base station indicating transmission failure of the data packet in the third step.

Now turning to the applied reference, <u>Parantainen</u> describes a method and arrangement for transferring information in a general packet radio service (GPRS) system. Figure 4 of Parantainen illustrates downlink communication between a base station and a

mobile station. <u>Parantainen</u> describes that upon initiation of a connection between the base station and the mobile station, data is transmitted on a downlink channel between the base station and mobile station along with information on the uplink channel to be used for acknowledgements and other signaling. <u>Parantainen</u> further describes that if a previously transferred packet data was not successfully received by the mobile station, the base station gets this information through the acknowledgement message sent from the mobile terminal and will then retransmit the data.

Claim 10 is distinguishable over <u>Parantainen</u> as the applied reference fails to disclose or suggest "a fourth step for the terminal to autonomously assign the resource for autonomous retransmission of a data packet from the plurality of data packets to the base station without sending a transmission request to the base station upon reception of the NAK signal from the base station indicating transmission failure of the data packet in the third step." (Emphasis added). In this regard, Claim 10 further recites "a third step for the terminal to transmit a plurality of data packets as the new data to the base station," where the plurality of data packets exclude "ACK and NAK packets." (Emphasis added).

As discussed above, <u>Parantainen</u> describes that a base station transmits data to the mobile station of <u>Parantainen</u>, and the mobile station sends an acknowledgement indicating that the data transmission was successful or unsuccessful. However, the acknowledgment data sent from the mobile terminal of <u>Parantainen</u> is not included in the claimed "plurality of data packets" since the plurality of data packets exclude "ACK and NAK packets."

Therefore, <u>Parantainen</u> fails to disclose or suggest "a third step for the terminal to transmit a plurality of data packets as the new data to the base station," where the plurality of data packets exclude "ACK and NAK packets" as recited in amended Claim 10.

See Parantainen at paragraphs [0066] to [0068] and Figure 4.

<sup>&</sup>lt;sup>2</sup> See Parantainen at paragraph [0068].

Parantainen further fails to disclose or suggest that the mobile station of <u>Parantainen</u> autonomously assigns a resource for autonomous retransmission of a data packet to the base station of Parantainen upon receiving a NAK signal from the base station. That is, as discussed above, Parantainen merely describes sending, by the mobile station of Parantainen, acknowledgment signaling indicating successful/unsuccessful data transmission by the base station of Parantainen. Therefore, Parantainen fails to disclose or suggest "a fourth step for the terminal to autonomously assign a resource for autonomous retransmission of a data packet from the plurality of data packets," as recited in amended Claim 10.

Love describes autonomous scheduling in an uplink channel between a mobile station and a base station. Love describes that when traffic volume is low, the autonomous scheduling of uplink transmissions is less of a concern because the likelihood of a collision of data being simultaneously transmitted by multiple mobile stations is low. However, in the event of a collision, Love describes that there are spare radio resources available to accommodate the need for any retransmissions.<sup>3</sup>

While Love describes autonomous scheduling of an uplink channel, <u>Love</u> fails to disclose or suggest that any retransmission on the uplink channel are autonomous. Therefore, Love fails to disclose or suggest "a fourth step for the terminal to autonomously assign the resource for autonomous retransmission of a data packet from the plurality of data packets to the base station without sending a transmission request to the base station for the resource upon reception of the NAK signal from the base station indicating transmission failure of the data packet in the third step," as recited in amended Claim 10. (Emphasis added).

Applicants have considered Haartsen and submit that the applied reference fail to cure the deficiencies of Parantainen and Love. Accordingly, Applicants submit that Parantainen,

<sup>&</sup>lt;sup>3</sup> See <u>Love</u> at paragraph [0009]

<u>Haartsen</u>, and <u>Love</u> fail to disclose or suggest all the features of Claim 10 as amended. Applicants respectfully request that the rejection of Claim 10, and claims depending therefrom, under 35 U.S.C. § 103(a) be withdrawn.

As Claims 11-13 are amended to recite features analogous to Claim 10, Applicants submit that <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u> fail to disclose or suggest all the features of Claims 11-13 as amended. Applicants respectfully request that the rejection of Claims 11-13, and claims depending therefrom, under 35 U.S.C. § 103(a) be withdrawn.

The outstanding Official Action rejected claims 15, 16, 18, and 19 under 35 U.S.C. §103(a) as unpatentable over <u>Parantainen</u>, <u>Haartsen</u>, <u>Love</u>, and MPEP §2144.03.

As discussed above, <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u> fail to disclose or suggest all the features of Claims 10-13, from which Claims 15, 16, 18, and 19 depend. Applicants have considered MPEP §2144.03 and submit that this cited portion of the MPEP fails to cure the deficiencies of <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u>. Accordingly, Applicants submit that there is no *prima facie* case of obviousness set forth for Claims 15, 16, 18, and 19.

Therefore, Applicants respectfully request that the rejection of Claims 15, 16, 18, and 19 be withdrawn.

The outstanding Official Action rejected Claims 21, 24, 27, and 30 under 35 U.S.C. §103(a) as unpatentable over <u>Parantainen</u>, <u>Haartsen</u>, <u>Love</u>, and <u>Diehl</u>.

As discussed above, <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u> fail to disclose or suggest all the features of Claim 13, from which Claims 21, 24, 27, and 30 depend. Applicants have considered <u>Diehl</u> and submit that the applied reference fails to cure the deficiencies of <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u>. Accordingly, Applicants submit that there is no *prima facie* case of obviousness set forth for Claims 21, 24, 27, and 30.

Therefore, Applicants respectfully request that the rejection of Claims 21, 24, 27, and 30 under 35 U.S.C. §103(a) be withdrawn.

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The outstanding Official Action rejected Claims 22, 25, 28, and 31 under 35 U.S.C. §103(a) as unpatentable over <u>Parantainen</u>, <u>Haartsen</u>, <u>Love</u>, and <u>Chen</u>.

As discussed above, <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u> fail to disclose or suggest all the features of Claims 10-13, from which Claims 22, 25, 28, and 31 depend. Applicants have considered <u>Chen</u> and submit that the applied reference fails to cure the deficiencies of <u>Parantainen</u>, <u>Haartsen</u>, and <u>Love</u>. Accordingly, Applicants submit that there is no *prima facie* case of obviousness set forth for Claims 22, 25, 28 and 31.

Therefore, Applicants respectfully request that the rejection of Claims 22, 25, 28, and 31 under 35 U.S.C. §103(a) be withdrawn.

Consequently, in view of the above amendments and present response, no further issues are believed to be outstanding. The present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

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